

COMPLETE LIST OF PUBLICATIONS

Number of publications 41. Number of first/second/last author publications: 8/15/2

Number of Citations >1000 (>800 without self-citations)

H-index 16 (WoS, data obtained on April 30, 2019)

50% (90%) of my publications are in the global top 10% (20%) of journals measured by their Impact Factor (Journal Citation Report)

2019

Madsen, M. V., **H. C. Steen-Larsen**, M. Horhold, (and 13 co-authors): Evidence of isotopic fractionation during vapor exchange between the atmosphere and the snow surface in Greenland. (Vol. 124, 2932-2945, 2019, Journal of Geophysical Research)

Bonne, J.-L., M. Behrens, H. Meyer, S. Kipfstuhl, B. Rabe, L. Schonicke, **H. C. Steen-Larsen**, M. Werner: Resolving the controls of water vapour isotopes in the Atlantic sector. (Vol. 10 (1632), 2019, Nature Communications)

Gao, J., Y. Tandong, V. Masson-Delmotte, **H. C. Steen-Larsen**, W. Wang: Collapsing glaciers threaten Asia's water supplies. (Vol 565, 19-21, 2019, Nature)

Wei, Z. W., X. Lee, (and 25 co-authors incl. **H. C. Steen-Larsen**): A global database of water vapor isotopes measured with high temporal resolutions infrared laser spectroscopy. (Vol 6, 180302, 10.1038/sdata.2018.302, 2019, Nature Scientific Data)

Zannoni, D., **H. C. Steen-Larsen**, B. Stenni, G. Dreossi, G. Rampazzo: Synoptic to mesoscale processes affecting the water vapor isotopic daily cycle over a coastal lagoon. (Vol 197, 118-130, 2019, Atmospheric Environment)

Zannoni, D. **H. C. Steen-Larsen**, G. Rampazzo, G. Dreossi, B. Stenni, A. Bergamasco: The atmospheric water cycle of a coastal lagoon: an isotope study of the interactions between water vapor, precipitation and surface waters (Accepted, 2019, Journal of Hydrology)

2018

Benetti, M., J. L. Lacour, A. E. Sveinbjornsdottir, G. Aloisi, G. Reverdin, C. Risi, A. J. Peters, **H. C. Steen-Larsen**: A framework to study mixing processes in the marine boundary layer using water vapor isotope measurements. (Vol. 45 (5), 2018, Geophysical Research Letters)

Gudlaugsdottir, H., **H. C. Steen-Larsen**, J. Sjolte, V. Masson-Delmotte, M. Werner, A. E. Sveinbjornsdottir: The influence of volcanic eruptions on weather regimes over the North Atlantic simulated by ECHAM5/MPI-OM ensemble runs from 800 to 2000 CE. (Vol 213, 211-223, 2018, Atmospheric Research)

Zheng, M. J., J. Sjolte, (and 5 co-authors incl. **H. C. Steen-Larsen**): Climate information preserved in seasonal water isotope at NEEM: relationships between temperature, circulation and sea ice. (Vol. 14, 7, 1067-1078, 2018, Climate of the Past)

2017

Steen-Larsen, H. C., C. Risi, M. Werner, K. Yoshimura, V. Masson-Delmotte: Evaluating the skills of isotope-enabled general circulation models against in situ atmospheric water vapor isotope observations, (Vol 122, 1, 246-263, 2017, Journal of Geophysical Research)

Ebner, P. P., **H. C. Steen-Larsen**, B. Stenni, M. Schneebeli, A. Steinfeld: Experimental observations of transient delta O-18 interaction between snow and advective airflow under various temperature gradient conditions, (Vol 11, 4, 1733-1743, 2017, The Cryosphere)

Benetti, M., **H. C. Steen-Larsen**, (and 18 co-authors): Stable isotopes in the atmospheric marine boundary layer water vapour over the Atlantic Ocean 2012-2015, (Vol. 4, 10.1038/sdata.2016.128, 2017, Nature Scientific Data)

2016

Berkelhammer, M., **H. C. Steen-Larsen**, A. Cosgrove, A. J. Peters, R. Johnson, M. Haydean, S. A. Montzka: Radiation and atmospheric circulation controls on carbonyl sulfide concentrations in the marine boundary layer, (Vol. 121, 13113-13128, 2016, Journal of Geophysical Research).

Galewsky, J., **H. C. Steen-Larsen**, (and 4 co-authors): Stable isotopes of hydrogen and oxygen in atmospheric water vapor and applications to the hydrological cycle, (Vol. 54, 2016, Reviews of Geophysics)

Berkelhammer, M., D. Noone, **H. C. Steen-Larsen**, (and 6 co-authors): Surface-atmosphere decoupling limits accumulation over Greenland, (Vol. 2. (4), e1501704–e1501704, 2016, Science Advances)

- Schaller, C., (and 5 co-authors incl. **H. C. Steen-Larsen**): A representative density profile of the North Greenland snowpack, (Vol. 10, 1991-2002, 2016, The Cryosphere)
- Casado, M., (and 12 co-authors incl. **H. C. Steen-Larsen**): Continuous measurements of isotopic composition of water vapour on the East Antarctic Plateau, (Vol. 16, 8521-8538, 2016, Atmospheric Chemistry and Physics)
- Ritter, F., **H. C. Steen-Larsen**, (and 8 co-authors): Isotopic exchange on the diurnal scale between near-surface snow and lower atmospheric water vapor at Kohnen station, East Antarctica, (Vol. 10, 1647-1663, 2016, The Cryosphere) (F. Ritter is former master student of H. C. Steen-Larsen)
- Kurita, N., (and 6 co-authors incl. **H. C. Steen-Larsen**): Influence of large-scale atmospheric circulation on marine air intrusion toward the East Antarctic coast, (Vol. 43, 2016, Geophysical Research Letters)
- Kurita, N., (and 6 co-authors incl. **H. C. Steen-Larsen**): Identification of air masses responsible for warm events on the East Antarctic coast, (Vol 12, 307-313, 2016, SOLA)

2015

- Bailey, A., D. Noone, M. Berkelhammer, **H. C. Steen-Larsen**, P. Sato: The stability and calibration of water vapor isotope ratio measurements during long-term deployments, (Vol. 8, 4521-4538, 2015, Atmospheric Measurement Techniques)
- Masson-Delmotte, V.[‡], **H. C. Steen-Larsen**[‡], (and 20 co-authors): Recent changes in North West Greenland climate documented by NEEM shallow ice core data and simulations, and implications for past temperature reconstructions, (Vol. 9, 1481-1504, 2015, The Cryosphere)
- [‡]Both authors contributed equally to the manuscript.

- Steen-Larsen, H. C.**, A. E. Sveinbjörnsdóttir, Th. Jonsson, F. Ritter, J.-L. Bonne (and 5 co-authors): Moisture sources and synoptic to seasonal variability in the North Atlantic water vapor isotopic composition (2015, 10.1002/2015JD023234, Journal of Geophysical Research)
- Bonne, J.-L., **H.C. Steen-Larsen**, C.Risi, M. Werner, H. Sodemann (and 10 co-authors): The summer 2012 Greenland heat wave: in situ and remote sensing observations of water vapour isotopic composition during an atmospheric river event, (Vol. 120, 7, 2014JD022602, 2015, Journal of Geophysical Research)
- Pang, H., H. Shugui, A. Landais, V. Masson-Delmotte, F. Prie, **H. C. Steen-Larsen**, (and 7 co-authors): Spatial distribution of 17O-excess in surface snow along a traverse from Zhongshan station to Dome A, Antarctica. (Vol. 414, 126-133, 2015, Earth and Planetary Science Letters)

2014

- Steen-Larsen, H. C.**, V. Masson-Delmotte, M. Hirabayashi, R. Winkler, K. Satow, F. Prie, (and 13 co-authors): What controls the isotopic composition of Greenland surface snow? (Vol. 10, 377-392, 2014, Climate of the Past)
- Steen-Larsen, H. C.**, A. Sveinbjörnsdóttir, A. Peters, V. Masson-Delmotte, M. P. Guishard, G. Hsiao, J. Jouzel, D. Noone, J. K. Warren, and J. W. C. White: Climatic controls on water vapor deuterium excess in the marine boundary layer of the North Atlantic based on 500 days of in situ measurements. (Vol. 14, 2363-2401, 2014, Atmospheric Chemistry and Physics Discussions)
- Bastrikov, V., **H. C. Steen-Larsen**, K. Gribanov, O. Cattani, V. Masson-Delmotte, J. Jouzel, V. Zakharov: Continuous measurements of atmospheric water vapor isotopes in Western Siberia (Kourovka, Russia) (7, 1763-1776, 2014, Atmospheric Measurement Techniques)
- Bonne, J.-L., V. Masson-Delmotte, O. Cattani, M. Delmotte, C. Risi, H. Sodemann, **H. C. Steen-Larsen**: The isotopic composition of water vapor and precipitation in Ivittuut, Southern Greenland (13, 30521-30574, 2014, Atmospheric Chemistry and Physics)
- Benetti, M., G. Reverdin, C. Pierre, L. Merlivat, C. Risi, **H. C. Steen-Larsen**, F. Vimeux: Deuterium excess in marine water vapor – dependency on relative humidity and surface wind speed during evaporation (119, 584-593, 2014, Journal of Geophysical Research)

2013

- Steen-Larsen, H. C.**, S. J. Johnsen, V. Masson-Delmotte, B. Stenni, C. Risi, H. Sodemann, (and 17 co-authors): Continuous monitoring of summer surface water vapour isotopic composition above the Greenland Ice Sheet (Vol. 13, 4815-4828, 2013, Atmospheric Chemistry and Physics) (Citation: 44)
- Ellehøj, M., **H. C. Steen-Larsen**, S. J. Johnsen, M. B. Madsen: Ice equilibrium fractionation factor of hydrogen and oxygen isotopes: Experimental investigations and implications for stable water isotope studies, Rapid communications in Mass Spectrometry (27, 2149-2158, 2013, Rapid Communications in Mass Spectrometry)

NEEM Community Members (incl. H. C. Steen-Larsen), Eemian interglacial reconstructed from a Greenland folded ice core, (Vol. 493, 489-494, 2013, Nature)

Berggren, A.-M., A. Aldahan, G. Possnert, M. Hansson, **H. C. Steen-Larsen**, A. S. Storm, C.-M. Mörth, A. Murad, Variability of ^{10}Be and $\delta^{18}\text{O}$ in snow pits from Greenland and a surface traverse from Antarctica, (Vol. 294, 568-572, 2013, Nuclear Instruments and Methods in Physics B)

2012

Landais, A., **H. C. Steen-Larsen**, M. Guillevic, V. Masson-Delmotte, B. Vinther, R. Winkler: Triple Isotopic composition of oxygen in surface snow and water vapor at NEEM (Greenland). (Vol 77, p. 304-316, 2012, *Geochimica et Cosmochimica Acta*)

Rhodes, R. H., N. A. N. Bertler, J. A. Baker, **H. C. Steen-Larsen**, S. B. Sneed, U. Morgenstern, and S. J. Johnsen: Little Ice Age climate and oceanic conditions of the Ross Sea, Antarctica from a coastal ice core record, (Vol. 8, 1223-1238, 2012, *Climate of the Past*)

2011

Steen-Larsen, H. C., V Masson-Delmotte, J. Sjolte, S. J. Johnsen, B. M. Vinther, (and 19 co-authors): Understanding the climatic signal in the water stable isotope records from the NEEM shallow firn/ice cores in North-West Greenland (Vol.116, D06108, 2011, *Journal of Geophysical Research*)

Simonsen, S. B., S. J. Johnsen, T. J. Popp, B. Vinther, V. Gkinis, **H. C. Steen-Larsen**: Past surface temperatures at the NorthGRIP drill site from the difference in firn diffusion of water isotopes (Vol 7, p. 921-942, 2011, *Climate of the Past*)

2010 or earlier

Steen-Larsen, H. C., E. D. Waddington, and M. R. Koutnik: Formulating an inverse problem to infer the accumulation-rate pattern from deep internal layering in an ice sheet using a Monte Carlo Approach, (p. 318-332, Vol 56 (196), 2010, *Journal of Glaciology*)

Pol, K., V. Masson-Delmotte, S. J. Johnsen, J. Jouzel, O. Cattani, G. Durand, S. Falourd, B. Minster, F. Parrenin, C. Ritz, **H. C. Steen-Larsen**, B. Stenni: New MIS 19 EPICA Dome C high resolution deuterium data: hints for a problematic preservation of climate variability in the "oldest ice". (Vol 298, p. 95-103, 2010, *Earth and Planetary Science Letters*)

Steen-Larsen, H. C. and Dahl-Jensen, D.: Modeling binge-purge oscillations for the Laurentide Ice Sheet using a plastic ice sheet, (p. 177-182, Vol 48, 2008, *Annals of Glaciology*)